Business & Leisure Micro Computers

16, The Square, Kenilworth. CV8 1EB. Tel: Kenilworth (0926) 512127

RAM 'B' EXPANSION BOARD

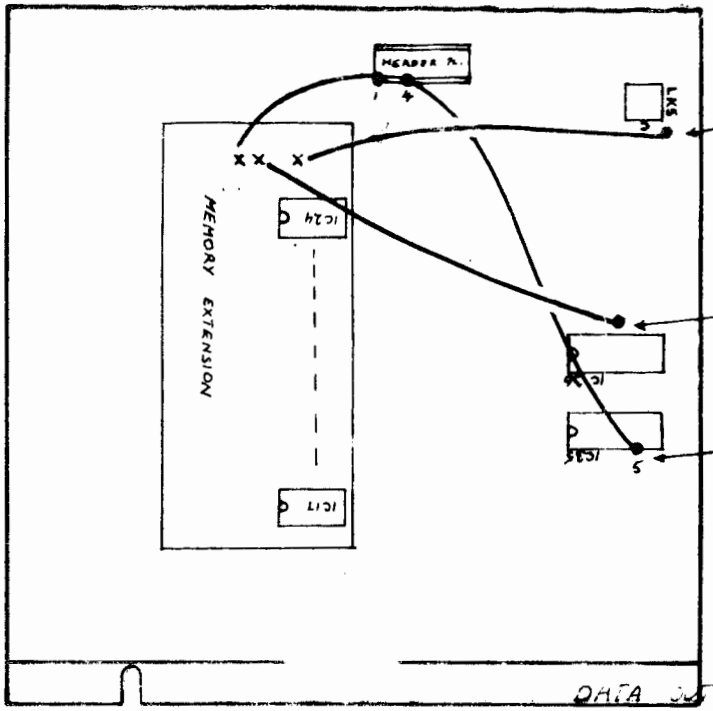
Design

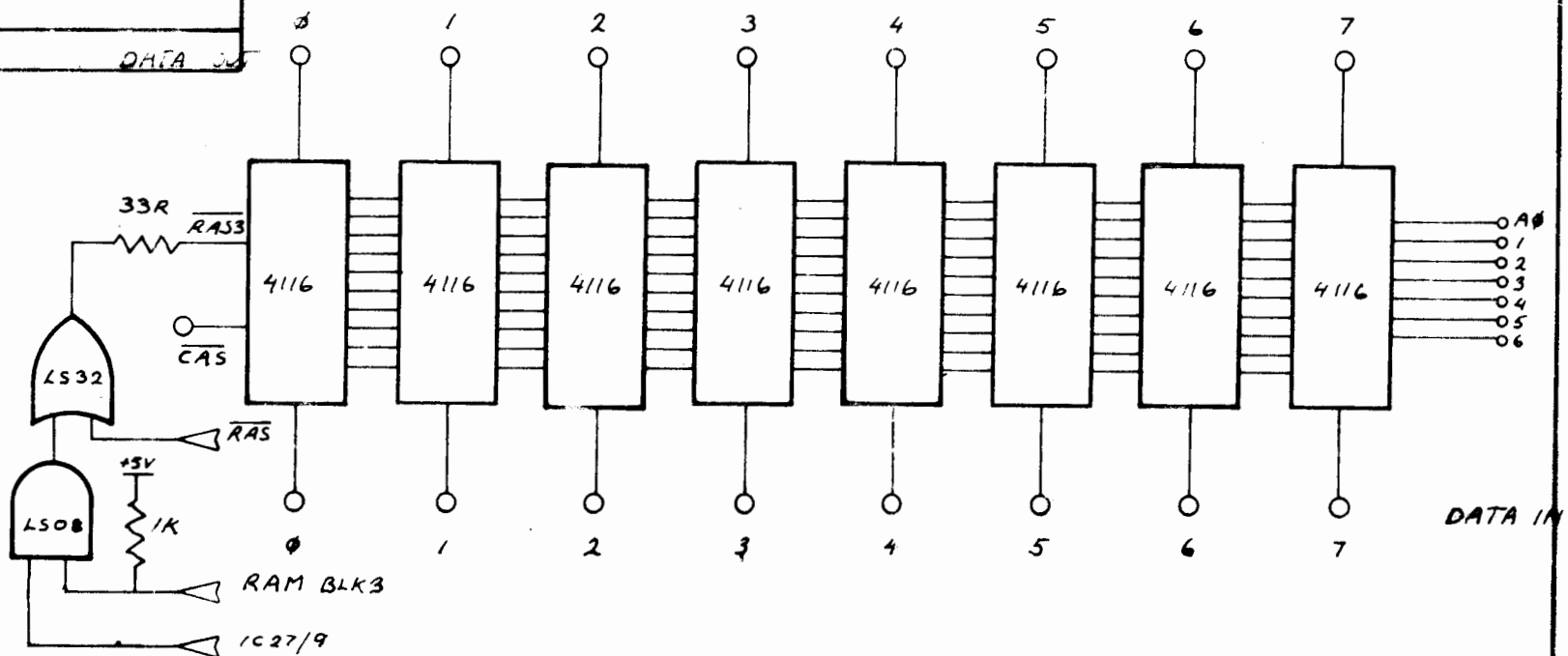
This expansion board is designed to be an add-on unit which takes the form of a PCB that is plugged into the last bank of RAM sockets: the RAM being moved to the new PCB. With this board fully populated the RAM 'B' has the maximum 64k available to a Z80 and it will still fit in a system with standard 1 inch spacing between boards.

Three additional wires are needed to provide the input signals detailed below. Only one extra internal signal needs to be generated on the PCB:- a NOT-RAS3 for the extra block of RAM. This is made by ANDing NOT-REFRESH with NOT-DECODE and ORing this signal with NOT-RAS. This is connected to the RAS pins on the extra block of 4116's. All other signals for the extra block are already present.

Installation.

Simply remove all of the 4116 RAM chips from the last bank on the RAM 'B'. This is the row nearest the middle of the RAM board. Plug the expansion PCB into these empty sockets and replace the 4116 chips in the corresponding sockets on the PCB, ensuring that they are the correct way round. If the capacitors between banks 1 & 2 on the RAM 'B' are too tall to allow proper fitment, they may be removed, as the required decoupling has been added to the extension board. Then, to provide the extra signals needed, connect the wires as shown in the diagram.





RAM b MEMORY EXTENSION